

July 08, 2009 11:18:21 AM

**Start Date:** 7/10/2009      **Start Qty:** 1.00  
**Required Date:** 7/31/2009      **Req'd Qty:** 1.00

**Accept**

**Setup Start**

**Stop**

**Reference:**

**Cust Item ID:**

**Customer:**

Run Start

**Stop**

**Approvals:** **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3391-025 PAR #: N/A Fault Category: Skedhube NCR: Yes No DQA: N Date: 09.11.06  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: N Date: 05.11.17

NCR: <u>50103</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09.09.23	120	SIGNIFICANT DENT NEAR SADDLE HOLES/ WAS buffed out? no one admitted to it.  RC: lack of attention - did not ask for approval prior to grinding.	<u>[Signature]</u> 05/11/23	SCRAP TUBE. WOULD REQUIRE ACC EXCESSIVE GRINDING AND MAT'L REMOVAL TO REMOVE MARK. POTENTIAL CRACK LOCATION UP 09.09.23	<u>[Signature]</u> 9-10-27	<u>[Signature]</u> 09/11/23	<u>[Signature]</u> 05/11/23	<u>[Signature]</u> 05/11/23

NOTE: Date & initial all entries

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<b>Start Date:</b>	7/10/2009	<b>Start Qty:</b>	1.00
<b>Required Date:</b>	7/31/2009	<b>Req'd Qty:</b>	1.00

**Reference:**

**Accept**

**Setup Start**

**Stop**

**Cust Item ID:**  
**Customer:**

Run Start

**Stop**

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	HAAS CNC VERTICAL MACHINING #1	0.00				1	0		
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA 599 Rev: <u>H</u> & Dwg D3391 Rev: <u>H</u> 2-Deburr								<u>PTO</u>
		Y.A 09/08/11							
130	QC2- Inspect parts off machine FAI/FAIB	0.00				1	0		
QC	Memo	0.00							
-Quality Control		Y.A 09/08/11							
140	QC8- Inspect parts - second check	0.00				1	0		
QC	Memo	0.00							
Quality Control		Y.A 09/08/11							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_

Run	Start	Stop
1	10:00	10:15
2	10:15	10:30
3	10:30	10:45
4	10:45	11:00
5	11:00	11:15
6	11:15	11:30
7	11:30	11:45
8	11:45	12:00
9	12:00	12:15
10	12:15	12:30
11	12:30	12:45
12	12:45	13:00
13	13:00	13:15
14	13:15	13:30
15	13:30	13:45
16	13:45	14:00
17	14:00	14:15
18	14:15	14:30
19	14:30	14:45
20	14:45	15:00
21	15:00	15:15
22	15:15	15:30
23	15:30	15:45
24	15:45	16:00
25	16:00	16:15
26	16:15	16:30
27	16:30	16:45
28	16:45	17:00
29	17:00	17:15
30	17:15	17:30
31	17:30	17:45
32	17:45	18:00
33	18:00	18:15
34	18:15	18:30
35	18:30	18:45
36	18:45	19:00
37	19:00	19:15
38	19:15	19:30
39	19:30	19:45
40	19:45	20:00
41	20:00	20:15
42	20:15	20:30
43	20:30	20:45
44	20:45	21:00
45	21:00	21:15
46	21:15	21:30
47	21:30	21:45
48	21:45	22:00
49	22:00	22:15
50	22:15	22:30
51	22:30	22:45
52	22:45	23:00
53	23:00	23:15
54	23:15	23:30
55	23:30	23:45
56	23:45	00:00

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**Work Order ID 50103**

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**Item ID:** D3391-025 **Accept** **Setup** **Start**  
**Revision ID:** H **Stop**  
**Item Name:** Aft Tube Assembly  
**Start Date:** 7/10/2009 **Start Qty:** 1.00 **Cust Item ID:**  
**Required Date:** 7/31/2009 **Req'd Qty:** 1.00 **Customer:**  
**Reference:**

**Approvals:** **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Run** **Start**  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00				_____	_____	_____	_____
200	Chemical Conversion Coat per QSI005 4.1	0.00							
HandFinish Hand Finishing	Memo	0.00				_____	_____	_____	_____
210	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00				_____	_____	_____	_____

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 50103

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Item ID: D3391-025 Accept Setup Start  
Revision ID: H Stop  
Item Name: Aft Tube Assembly  
Start Date: 7/10/2009 Start Qty: 1.00 Cust Item ID:  
Required Date: 7/31/2009 Req'd Qty: 1.00 Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	Skidtubes	0.00							
Skidtubes	Memo	0.00							
Skidtubes	Instal spacers as per dwg D3391 A/R Magnabond 6398 Batch: _____ exp. date : _____ cure time 12hrs as per QSI0015								
230	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									
240	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
Powdercoat	Memo	0.00							
Powder Coating	START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____								

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 50103

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Item ID: D3391-025 Accept Setup Start  
Revision ID: H Stop  
Item Name: Aft Tube Assembly  
Start Date: 7/10/2009 Start Qty: 1.00 Cust Item ID:  
Required Date: 7/31/2009 Req'd Qty: 1.00 Customer:  
Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00							
260	HandFinishing	0.00							
HandFinish Hand Finishing	Memo 1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/ R Sikaflex-241/-291 _____ Sikaflex expiry date: _____	0.00							
270	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo	0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 50103**

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**Item ID:** D3391-025 **Accept** **Setup** **Start**  
**Revision ID:** H **Stop**  
**Item Name:** Aft Tube Assembly  
**Start Date:** 7/10/2009 **Start Qty:** 1.00 **Cust Item ID:**  
**Required Date:** 7/31/2009 **Req'd Qty:** 1.00 **Customer:**  
**Reference:**

**Approvals:** **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Run** **Start**  
**QC:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **SPC (Y/N):** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Stop**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	Identify as per dwg & Stock Location: _____	0.00							
Packaging	<b>Memo</b>	0.00							
Packaging									
290	QC21- Final Inspection - Work Order Release	0.00							
QC	<b>Memo</b>	0.00							
Quality Control									

u 9.10.30

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

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Page 1

Work Order ID: 50103

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D6014-090RevA		Manufactured	No			100	Each	22.0000	1.0000			

ALUMINUM EXTRUSION

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

LG

22

42768

22

D3670-4-200RevA

Manufactured      No

230

Each

179.0000      4.0000

SPACER

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST

179

46106

16

47122

36

48198

42

48269

85

Q. m 09.07.14

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 50103

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2646RevC		Manufactured	No			270	Each	60.0000	1.0000			
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Aft Cap

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
ST	60	
20208	0	
43801	2	
46327	8	
48109	50	

D3537-1RevC		Manufactured	No			270	Each	86.0000	1.0000			
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Wearpad

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
FP	60	
48288	60	
Main Warehouse		
ST	26	
47715	1	
48162	25	

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Shop Packet Print

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

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Work Order ID: 50103

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3537-7RevC		Manufactured	No			270	Each	29.0000	1.0000			
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Wearpad

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	29	
33869	1	
45408	14	
46346	14	

D3553-1RevA		Manufactured	No			270	Each	24.0000	1.0000			
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Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	24	
33868	24	

D3553-3RevA		Manufactured	No			270	Each	13.0000	1.0000			
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Gasket

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	13	
33870	5	
47206	8	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Work Order ID: 50103

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D3672-1RevB		Manufactured	No			270	Each	736.0000	2.0000			
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Phenolic Washer

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	736	
39275	19	
42329	143	
47628	574	

ALS4-1032-130		Purchased	No			260	Each	7,799.000	14.0000			
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Insert

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	7799	
110511	7799	

ALS4-1032-225		Purchased	No			270	Each	9,205.000	12.0000			
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Insert

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	9205	
107441	28	
110768	9177	

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



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Work Order ID: 50103

Parent Item: D3391-025RevH

Parent Item Name: Aft Tube Assembly

Start Date: 7/10/2009

Required Date: 7/31/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3C4A		Purchased	No			270	Each	274.0000	6.0000			
BOLT												
				<u>Warehouse</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
				<u>Location</u>								
				Main Warehouse								
				ST			274					
					112082		274					
AN3C5A		Purchased	No			270	Each	546.0000	4.0000			
Bolt												
				<u>Warehouse</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
				<u>Location</u>								
				Main Warehouse								
				ST			546					
					111424		8					
					111707		538					
AN960C10L		Purchased	No			270	Each	4,998.000	10.0000			
washer												
				<u>Warehouse</u>			<u>Loc Qty</u>		<u>Loc Code</u>			
				<u>Location</u>								
				Main Warehouse								
				ST			4998					
					103585		100					
					112116		4898					

July 08, 2009 11:18:20 AM

Shop Packet Print

Page 5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 50103
<b>Description:</b> Float Skidtube (412)		<b>Part Number:</b> D3391-3
<b>Inspection Dwg:</b> D3391 <b>Rev:</b> H		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
14.000	+/-0.010	14.000	✓			
3.500	+/-0.010	3.493	✓			
88.93	+/-0.030	88.930	✓			
44.995	+/-0.030	45.000	✓			
Ø3.200	+/-0.010	3.204	✓			
88.93	+/-0.030	88.930	✓			
Ø3.750	+/-0.010	3.752	✓			
30° x 160" chamfer	+/-0.010	30° x 160"	✓			

**Measured by:** am

**Date:** 09.07.15

**Audited by:** S

**Date:** 9/7/15

HAAS Section						
1.526	+0.000/-0.030	1.503	✓			
0.200	+/-0.010	0.200	✓			
7.500	+/-0.010	7.500	✓			
27.750	+/-0.010	27.750	✓			
31.750	+/-0.010	31.750	✓			
35.250	+/-0.010	35.250	✓			
3.300	+/-0.010	3.300	✓			
0.200	+/-0.010	0.200	✓			
3.520	+/-0.010	3.524	✓			
0.687	+0.010/-0.000	0.693	✓			
R0.062	+/-0.010	R0.063	✓			
Ø0.484	+0.005/-0.001	Ø0.487	✓			

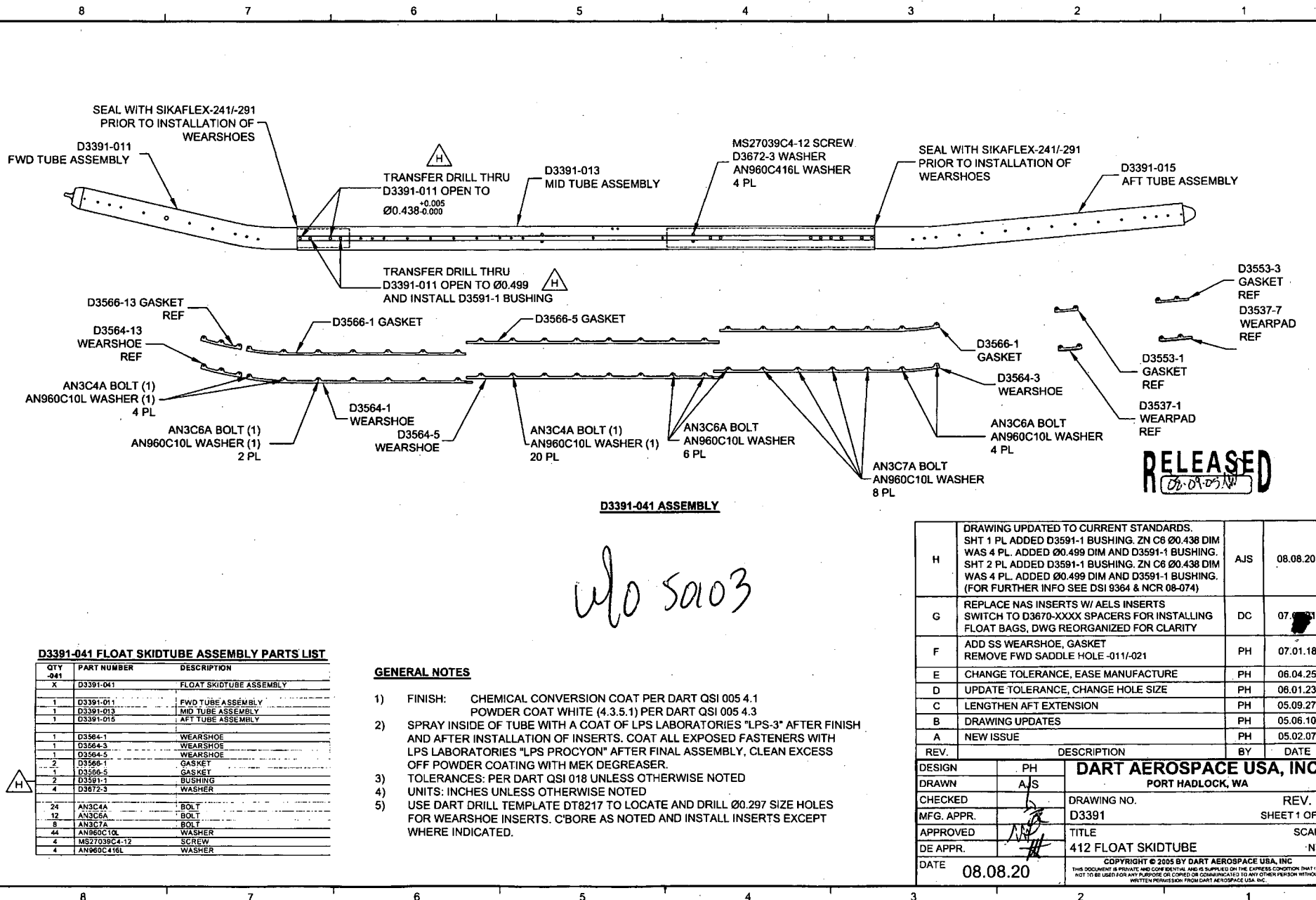
**Measured by:** B.A

**Date:** 09/08/11

**Audited by:** SA 09/08/11

**Date:**

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
B	06.06.19	Dwg revision update	KJ/JLM	
C	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	



# D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
2	D3566-5	GASKET
2	D3591-1	BUSHING
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

## GENERAL NOTES

- FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL  $\varnothing 0.297$  SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 $\varnothing 0.438$ DIM WAS 4 PL. ADDED $\varnothing 0.499$ DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 $\varnothing 0.438$ DIM WAS 4 PL. ADDED $\varnothing 0.499$ DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.01.21
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	08.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	<b>DART AEROSPACE USA, INC</b> PORT HADLOCK, WA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 1 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

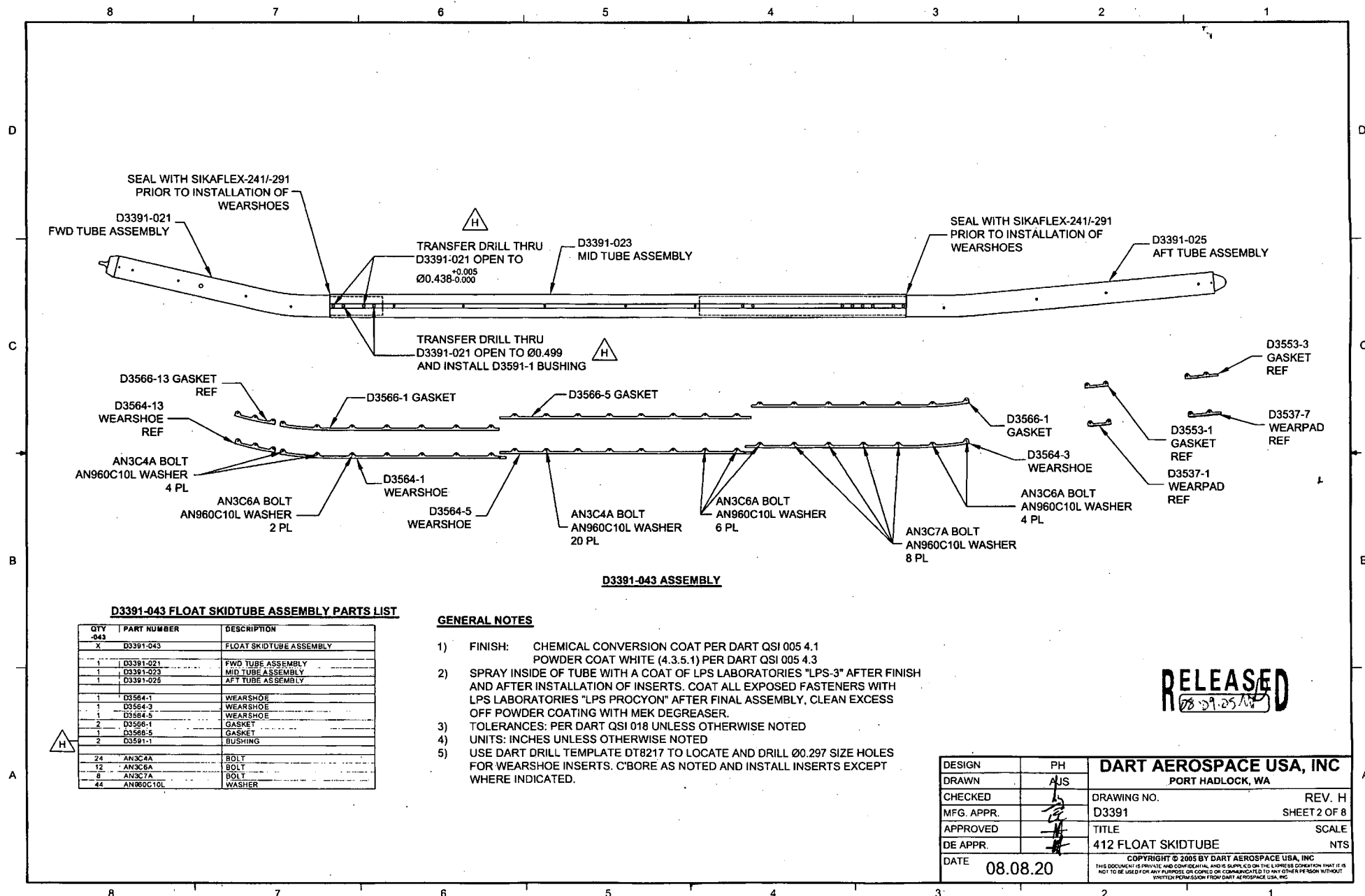
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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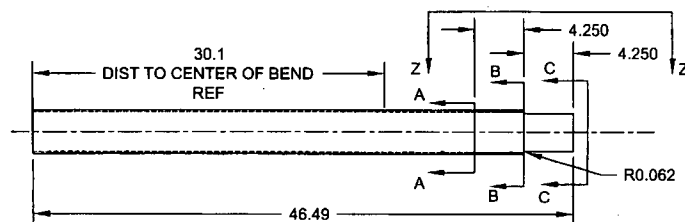
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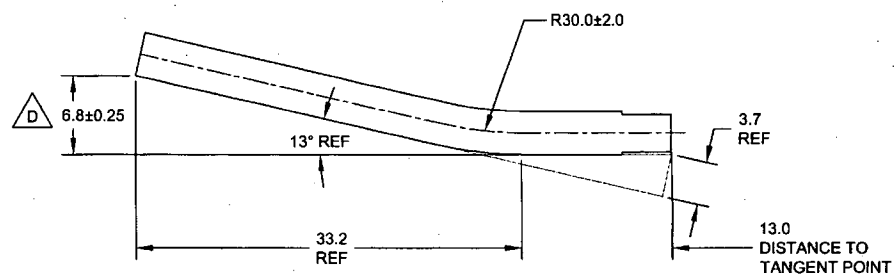
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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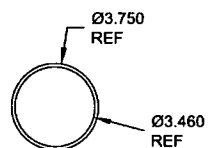
50103



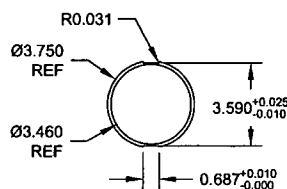
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(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



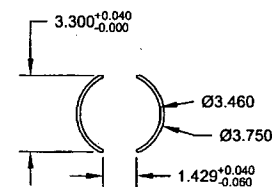
**D3391-011/-021 BENDING DETAIL**  
(MAKE FROM D3391-1)



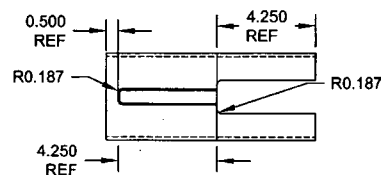
**SECTION A-A**  
SCALE 2X



**SECTION B-B**  
SCALE 2X



**SECTION C-C**  
SCALE 2X



**VIEW Z-Z**  
SCALE 2X

**RELEASED**  
08-05-11

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CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 3 OF 8
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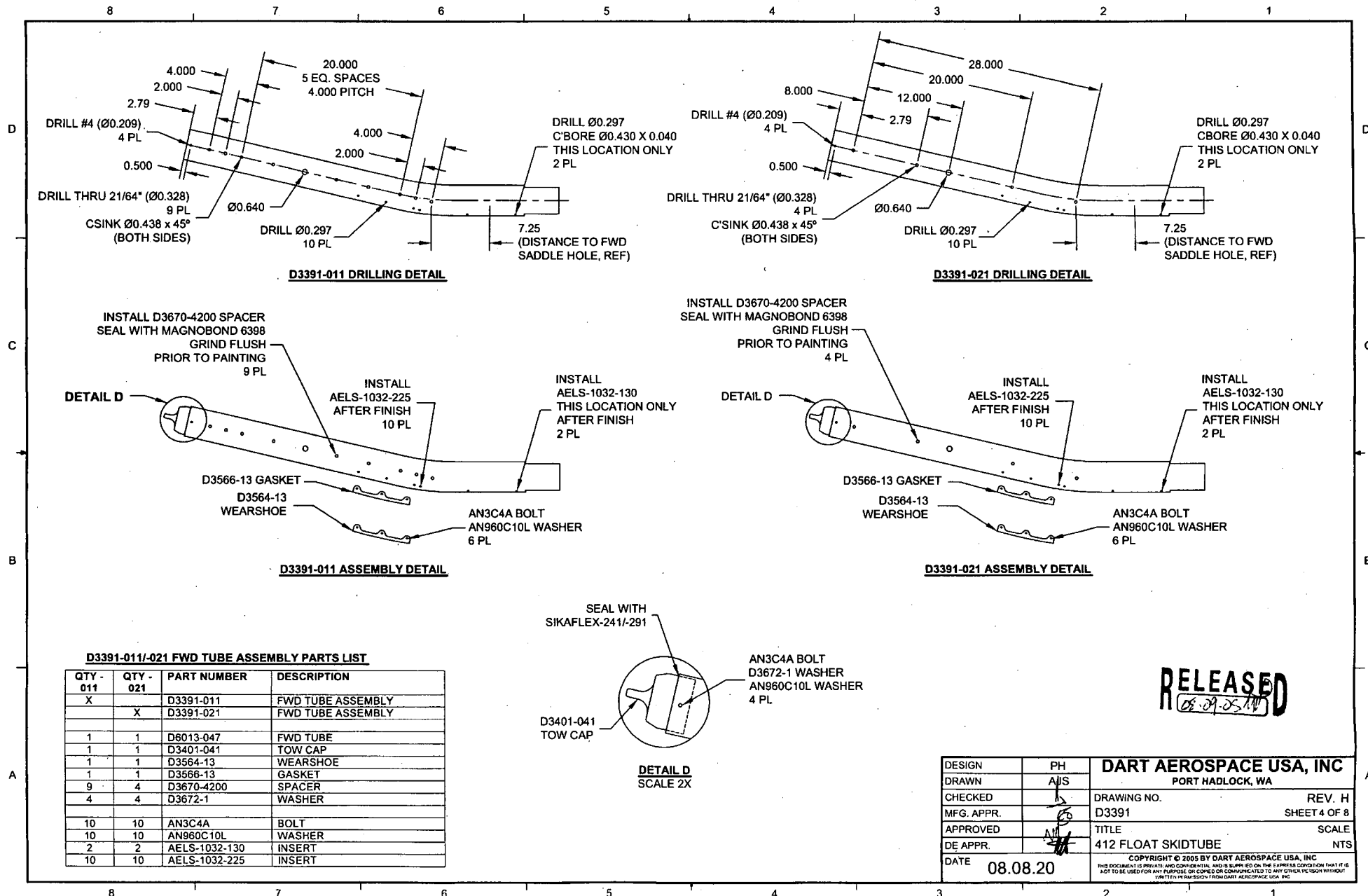
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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**8                      7                      6                      5                      4                      3                      2                      1**



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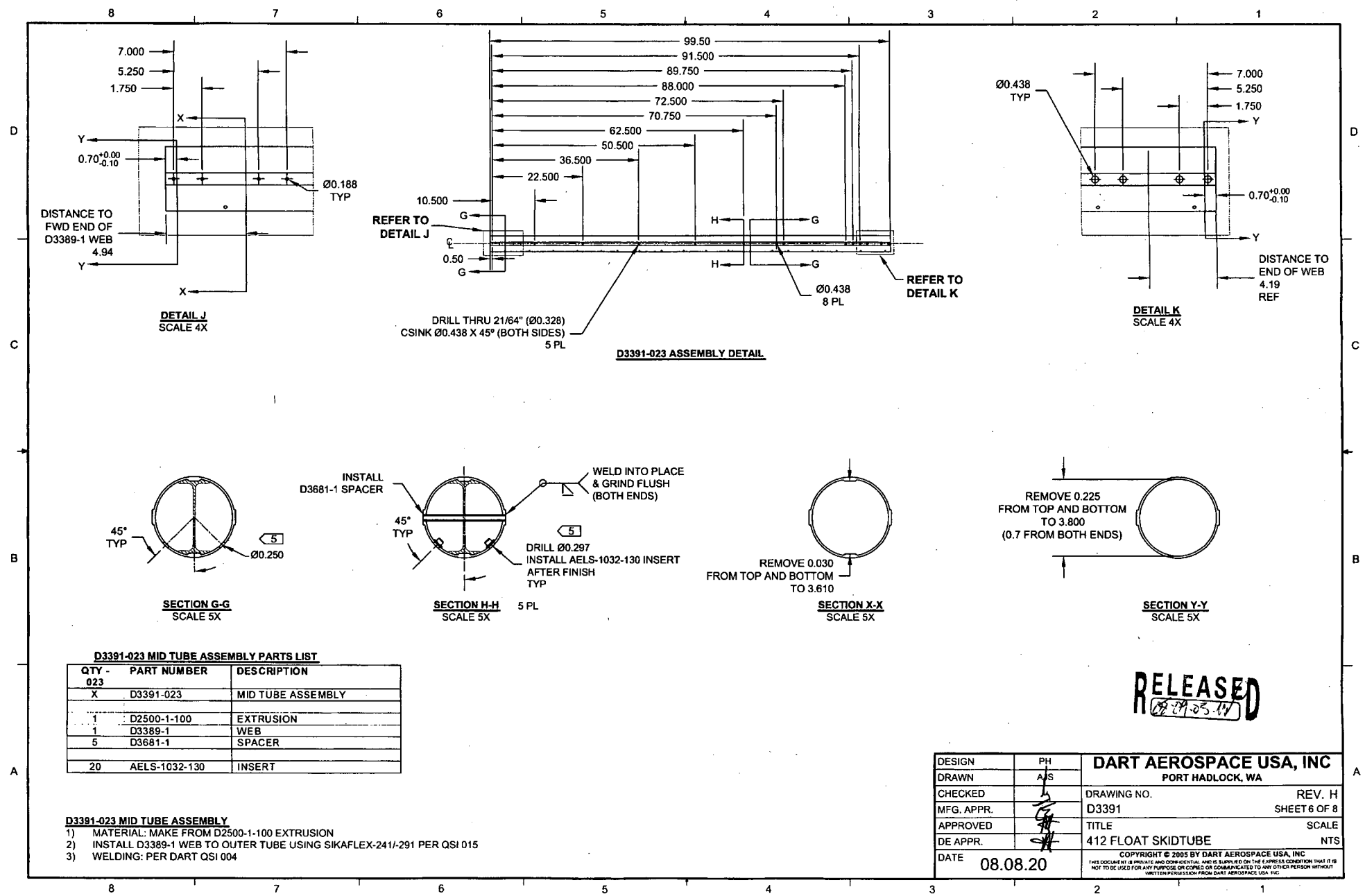
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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**D3391-023 MID TUBE ASSEMBLY PARTS LIST**

QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

- D3391-023 MID TUBE ASSEMBLY**
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
  - 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
  - 3) WELDING: PER DART QSI 004

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
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MFG. APPR.	h	D3391	SHEET 6 OF 8
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08-05-17

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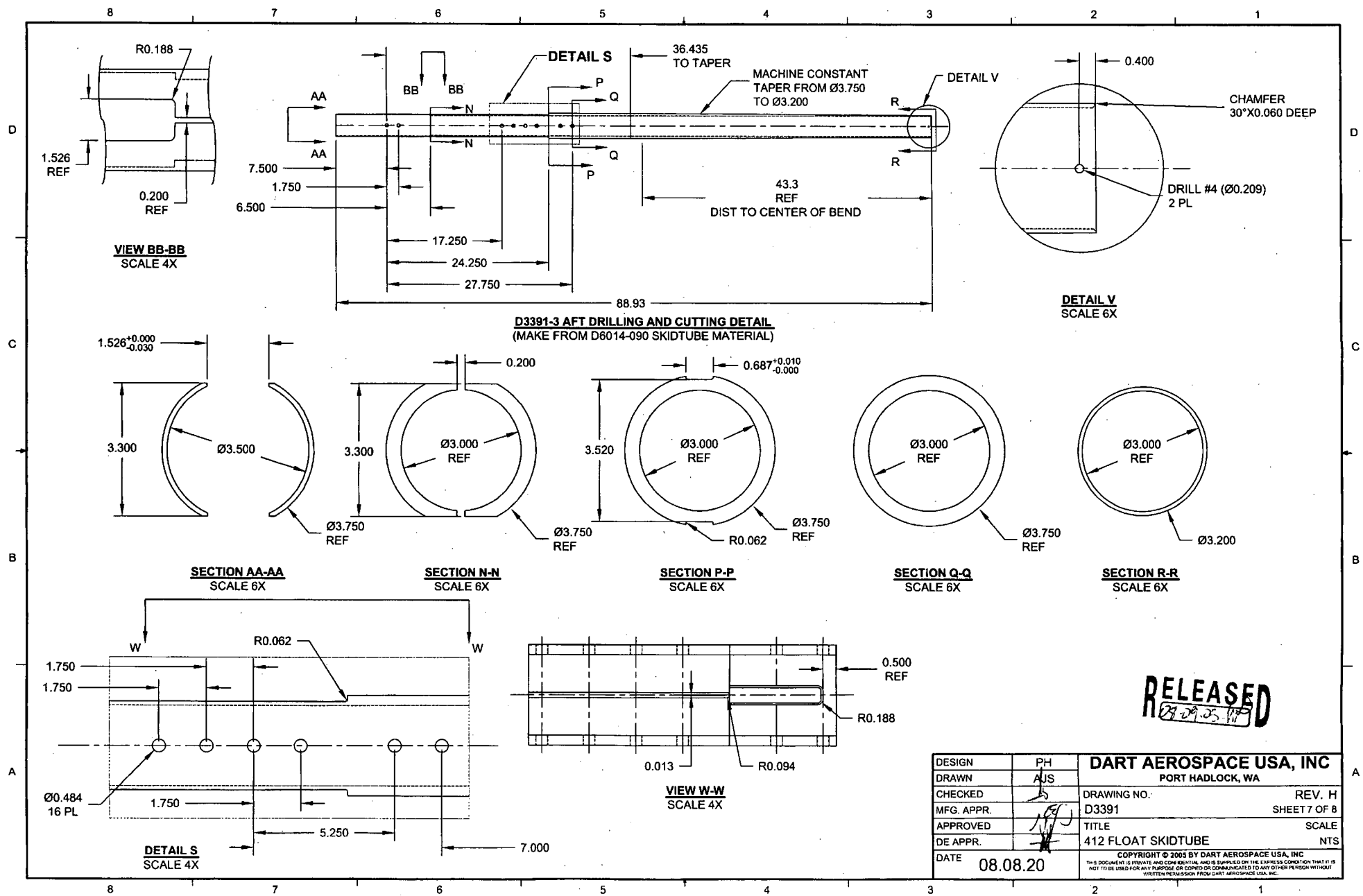
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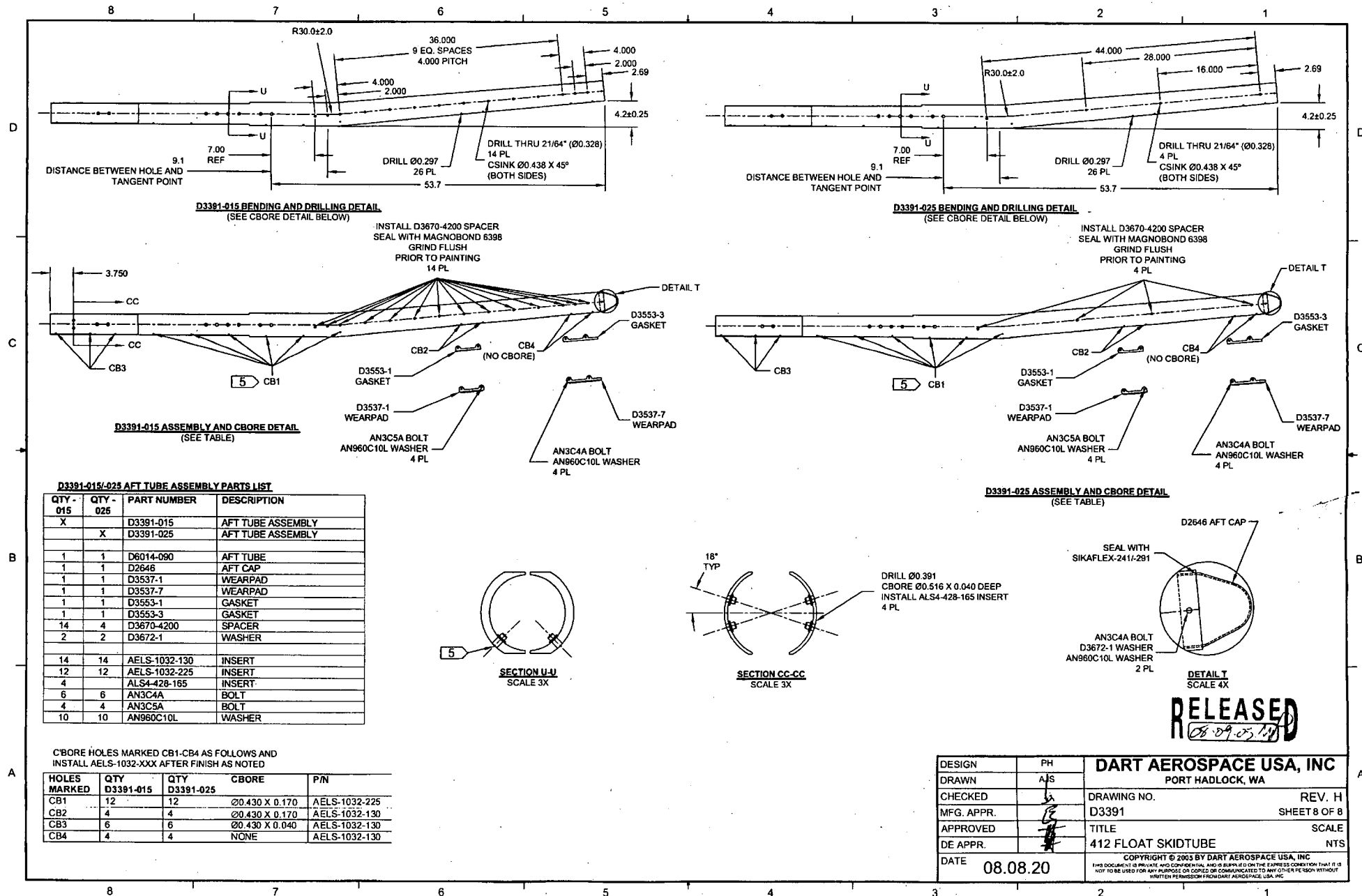
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